

REMARKS

Claims 1-11 are pending and stand rejected. Claim 10 has been amended.

Claim 10 is objected to because of informalities.

Applicant, through his attorney, thanks the examiner for his observation regarding claim 10 and has made the appropriate correction.

Applicant respectfully request the objection be withdrawn.

Claims 1, 2, 3, 5, and 7-10 stand rejected under 35 USC 102(e) as being anticipated by Furuya (USP No. 5,774,562).

Applicant respectfully disagrees with, and explicitly traverses, the examiner's reason for rejecting the claims. A claim is anticipated only if each and every element recited therein is expressly or inherently described in a single prior art reference.

Claim 1 recites, in relevant part:

1. An audio arrangement that utilizes an energy transfer function for delay compensation, said arrangement comprising:

a plurality of audio sources ...;

a controller that causes the processor to maximize a power measure of the combined audio signal, wherein the controller is arranged to limit a combined power gain measure of the processed audio signals to a predetermined value without measuring an energy transfer at each site where one respective audio source of the plurality of audio sources receives the input audio signals. (emphasis added).

Furuya teaches a system for dereverberation of provided speech wherein input signals from multiple channels are each processed by an inverse filter process and a dereverberation evaluation unit that evaluates dereverberation performance on the basis of an output signal from the inverse filter processor and the input signals of respective channels. Furuya further teaches that "error signals $e_1(z)$, $e_2(z)$, which are the output from the respective subtractors represent evaluation values for the dereverberation performance, and it can be shown that when such error signals become equal to 0, the dereverberation is completely achieved." (See col. 4, lines 57-61). Furuya further teaches achieving zero error signals by adjusting filter coefficients of channel transfer

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function simulating filters to match the filter coefficients of the inverse filters. (see col. 6, lines 1-9).

Furuya cannot be said to anticipate the present invention, because Furuya fails to disclose each and every element recited. First, Furuya fails to disclose scaling means applied to the input signals. Rather, Furuya teaches the input signals applied to inverse filters. Furuya does not recite that the inverse filters are used to scale the input signals in any way.

Furuya, further, fails to teach "maximize a power measure of the combined audio signal, wherein the controller is arranged to limit a combined power gain measure of the processed audio signals to a predetermined value," as is recited in the claim. Rather, it appears that the examiner has interpreted what the applicant has disclosed in the written description of the instant invention regarding achieving a zero error value and maximizing a power limited to a predetermine value as being the same processing step or claim element. However, although Furuya may teach achieving a zero value, Furuya fails to show how "adjusting filter coefficients of channel transfer function simulating filters to match the filter coefficients of the inverse filters" is the same as "maximizing a combined power ... limited to a predetermine value," as is recited in the claims.

Having shown that Furuya fails to disclose each and every element claimed, applicant submits that the reason for the examiner's rejection of the claim has been overcome and can no longer be sustained. Applicant respectfully requests reconsideration, withdrawal of the rejection and allowance of the claim.

With regard to claims 8, 9 and 10, these claims were rejected for the same reason recited in rejecting claim 1. Thus, applicant's remarks made in response to the examiner's rejection of claim 1 are also applicable in response to the examiner's rejection of claims 8-10. Accordingly, applicant submits that in view of the remarks made with regard to the rejection of claim 1, which are repeated herein in response to the rejection of claims 8-10, the examiner's reasons for rejecting claims 8-10 have been overcome and the rejection can no longer be sustained. Applicant respectfully requests withdrawal of the rejection and allowance of the claims.

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With regard to claims 2, 3, 5, and 7, these claims ultimately depend from claim 1 which has been shown to contain subject matter not disclosed in the cited reference. Accordingly, these claims are also contain subject matter not disclosed in the cited reference by virtue of their dependency upon claim 1. Hence, for the same reasons recited with regard to claim 1, applicant respectfully requests reconsideration, withdrawal of the rejection and allowance of the claims.

Claim 4 stands rejected under 35 USC 103(a) as being unpatentable over Furuya in view of Kellermann (USP No. 5,602,962). Claim 6 stands rejected under 35 USC 103(a) as being unpatentable over Furuya in view of Kandeia (USP No. 4,536,887). Claim 11 stands rejected under 35 USC 103(a) as being unpatentable over Furuya in view of Anderson (USP No. 6,37,887).

With regard to claim 4, this claim depends from claim 2, which depends from claim 1, which has been shown to contain subject matter not recited by Furuya. Kellerman discloses a speech processing arrangement that selects one signal as a reference signal and forms speech signal ratios by dividing the estimated speech components by the estimated reference speech component and forming a weighted factors by dividing the estimated speech signals by the estimated noise components to reduce the noise component of combined signal. Kellerman fails to teach or suggest scaling means or "limit[ing] a combined power gain measure ... to a predetermined value," as is recited in the claims.

Hence, even if there were some motivation to combine the teachings of Furuya and Kellerman, the combined device would not include all the elements recited in the claim. Having shown that the combined device of Furuya and Kellerman fails to include all the elements claimed, applicant submits that the examiner's reason for rejecting the claims has been overcome and can no longer be sustained. Applicant respectfully requests reconsideration, withdrawal of the rejection and allowance of the claims.

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With regard to claim 6, this claim depends from claim 5, which depends from claim 1, which has been shown to contain subject matter not recited by Furuya. Kaneda discloses a multiple microphone element system receiving an acoustic signal and delaying, weighting and summing the received signal. Kaneda fails to teach or suggest "limit[ing] a combined power gain measure of the processed audio signals to a predetermined value," as is recited in the claims.

Hence, even if there were some motivation to combine the teachings of Furuya and Kaneda, the combined device would not include all the elements recited in the claim.

Having shown that the combined device of Furuya and Kaneda fails to include all the elements claimed, applicant submits that the examiner's reason for rejecting the claims has been overcome and can no longer be sustained. Applicant respectfully requests reconsideration, withdrawal of the rejection and allowance of the claims.

With regard to claim 11, this claim depends from claim 1, which has been shown to contain subject matter not recited by Furuya. Anderson discloses a multiple microphone element system that turns ON only if a talker's speech originates from within a specified "acceptance angle" in front of the microphones. Anderson fails to teach or suggest scaling means and "limit[ing] a combined power gain measure of the processed audio signals to a predetermined value," as is recited in the claims.

Accordingly, even if there were some motivation to combine the teachings of Furuya and Anderson, the combined device would not include all the elements recited in the claim.

Having shown that the combined device of Furuya and Anderson fails to include all the elements claimed, applicant submits that the examiner's reason for rejecting the claims has been overcome and can no longer be sustained. Applicant respectfully requests reconsideration, withdrawal of the rejection and allowance of the claims.

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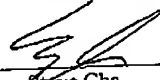
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For all the foregoing reasons, it is respectfully submitted that all the present claims are patentable in view of the cited references. A Notice of Allowance is respectfully requested.

Respectfully submitted,

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